TECHNICAL DATA SHEET

ShieldPrime IC

ShieldCrete®

Adhesion Promoter for Polyurea Membrane

info@shieldcreteinternational.com
www.shieldcreteinternational.com

Product Description

ShieldPrime IC is a solvent based aromatic polyurethane primer and its main properties are:

- ✓ Promotes the adhesion of a new polyurea or solvent-based polyurethanes to an older polyurea.
- ✓ Promotes the adhesion of a new solvent-based polyurethane to an older solvent-based polyurethane.
- ✓ High flexibility
- ✓ Easy to apply
- ✓ CE Mark according EN 1504-2 and EN 13813

Main Applications

ShieldPrime IC is recommended for bonding new polyurea membranes or solvent based polyurethane coatings to aged polyurea membranes or polyurea membranes which maximum overcoating time has been exceeded.

It is also recommended to bond new solvent-based polyurethane coatings to aged solvent-borne polyurethane coatings or when the maximum overcoating time has been exceeded.

It can be used as a primer for asphaltic roofing sheets for roofs without mineral protection.

Properties

Finish	Gloss
Colour	Transparent red (Z883)
Components	2
Mixing Ratio (by weight)	Resin 7P-911 1 part Cure 7P-912 1 part
Pot Life of the Mixture	8 hours at 23ºC and 50 % RH The useful pot-life of the mixture depends on the temperature, relative humidity, and mixed quantities.
Volume Solids	36 % (theoretical value)
Specific Gravity	1.013 ± 0.02 g/mL
Theoretical Coverage	0.05 – 0.1 L/m² It depends on the roughness and application method.
Number of Coats	1
Application Method	Airmix spray, brush, or roller
Drying time	At 23 ºC and 0.10 L/m² Light traffic: 16 hours Overcoating: Min: 2 hours Max: 24 hours Total: 7 days Drying times depend on air temperature, surface temperature, ambient humidity, ventilation, and film thickness. If the maximum recoating time is exceeded, a new layer should be applied. The adhesion properties are only achieved after 7 days of system curing.

Surface Preparation

The surface must be well adhered, clean, dry, and free of oils, grease, dust, and contamination. Wash the surface with neutral detergents followed by cleaning with high pressure clean water.

In areas where it was not possible to remove the contaminations, degrease with 52-510.0000 or by using mechanical tools.

Application

Pre-shake the liquid component. Add the liquid component to the resin component and stir the mixture for 5 minutes. In closed areas, good ventilation conditions must be created during application and drying so solvents are eliminated.

Ambient Application Conditions:

- Temperature: 10 - 35ºC
- Relative humidity: 50 - 85%
- Minimum surface temp.: 3ºC above dew point, minimum 10ºC
- Support humidity: less than 4% in depth (with "Tramex" equipment or similar)

The ShieldPrime IC should not be in contact with water before being coated with the new polyurea layer.

Application Equipment:

- Airmix Spray: 10 - 35ºC
- Fluid tip orifice size: 0.009 – 0.011 inches (0.22 – 0.28 mm)
- Air Pressure: 3.5 – 4.0 kg/cm²
- Work Pressure: 160 – 180 kg/cm²
- Thinning: 0%
- Brush / Roller: Recommended
- Thinning: 0%

Cleaner Thinner:

- 52-510.0000 (Dil. Industrial Cel)

Additional Information

Curing Mechanism – By solvent release and by reaction with the air humidity.

Volatile Organic Compounds (VOC)

UE limit for the product (cat. A/h): 750 g/L

Maximum VOC content:

- Resin: less than 348 g/L
- Liquid: less than 862 g/L
- Cleaner Thinner: less than 864 g/L
- Mixture: less than 605 g/L*

* The VOC value shown above refers to a ready to use product, as tinted, thinned, etc, in accordance with our recommendations. We are not responsible for products obtained by mixing products with are different from those we have recommended, and we must draw attention to the responsibility of anyone involved within the supply chain not to infringe Directive 2004/12/CE.

Flashpoint (EN 426)

- Resin: 200ºC
- Liquid: less than 0ºC
- Cleaner Thinner: less than 0ºC

Supply Form

- Resin: 2.5 L
- Liquid: 2.5 L

Shelf-life

Resin: 2 years, when stored in original containers, indoors, between 5 and 40ºC.

Liquid: 2 years, when stored in original containers, indoors, between 5 and 40ºC.

CE Marking

CE Marking of this product is the evidence given by ShieldCrete® International that this product is subject to the provisions of Community Directives of the Construction Products that are applicable with European Regulation nº 305/2011 on March, 9 of 2011.

This product also complies with the requirements refereed in the Annex ZA of the European Standard EN 1504-2 "Products and Systems for the protection and repair of concrete structures. Definitions, requirements, quality control and conformity assessment. Part 2: Surface protection systems for concrete", according to the principles 1 (protection against the ingress), 2 (humidity control) and 8 (increased resistivity), in line with a compliance system 4 and 3. This product complies with the requirements refereed in the Annex ZA of the European Standard EN 13813. "Screed material and floor sounds – Sound material - Properties and requirements", in line with a compliance system 3.

CE

ShieldCrete® International SDN BHD
66 Jalan Setiakasih 9 Bukit Damansara, Kuala Lumpur, Malaysia
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EN 1504-2 and EN 13813
Declaration of performance: CE-7P910

Products for the superficial protection. Protection against ingress, humidity control, increasing resistivity and physical resistance.

Abrasion resistant	< 150 mg (H18, 1000 g, 1000 cycles)
Impact resistance	≥ 10 Nm (Class II)
Water permeability	w < 0.01 kg/(m^2.h$^{0.5}$)
Bond Strength	≥ 2.0 N/mm^2
Water vapour permeability	S_D < 1 m (Class I)
Permeability of CO_2	S_D > 400 m
Fire Reaction	Euroclass E
Dangerous substances	Complies with a 5.3 clause

Continuous floor coating.

Classification	SR-E_{fl}-B2-IR10
Bond Strength	> 2.0 N/mm^2
Impact resistance	≥ IR10
Fire reaction	Euroclass E_{fl}

Notes

a) The Resin of this product are based on isocyanates that reacts with moisture in the air, whereby their packaging must remain open as short a time as possible and be sealed tightly after use to not harden. Even with this precaution, the product stability will be affected and always lower than a product in original unopened containers.

b) The CE Marking was made in conjunction with the finish ShieldPoly F-15(za).

Health, Safety, and the Environment

- ✓ Protect the eyes and skin from contact.
- ✓ Gloves, goggles, and appropriate clothing should be worn.
- ✓ Keep out of the reach of children.
- ✓ Use only in well ventilated areas.
- ✓ Do not empty into drains.
- ✓ Keep the container properly sealed and stored in the correct place.
- ✓ Take correct measures when transporting the product to avoid any accidents that could rupture the can or cause damage to the packaging.
- ✓ Ensure that the container is correctly stacked in a safe area.
- ✓ Do not store or use the product in extreme temperature conditions.
- ✓ Always take account of the appropriate legislation relating to the environment and Health and Safety at Work.

For more information it is essential to read the label on the container and the Material Safety Data Sheet of this product, its components and all complementary products referred on Technical Data Sheet.

DISCLAIMER

The information provided herein, especially recommendations for the usage and the application of our products, is based upon our knowledge and experience. Due to different materials and equipment used, as well as varying working conditions and environments beyond our control we strictly recommend carrying out intensive trials to test the suitability of our products regarding the required processes and applications. This data sheet is provided free of charge, and we do not accept any liability regarding the above information or regarding any verbal recommendation, except for cases where we are liable of gross negligence or false intention.